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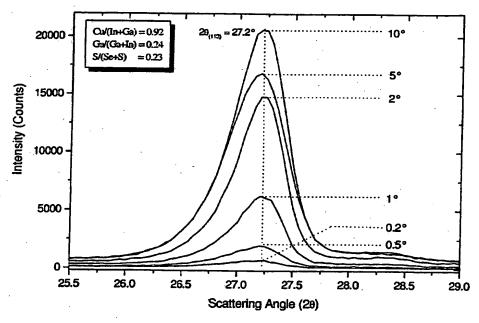
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- (71) Applicant (for all designated States except US): RAND AFRIKAANS UNIVERSITY [ZA/ZA]; Cnr Kingsway & University Roads, Auckland Park. 2006 Johannesburg (ZA).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): ALBERTS, Vivian [ZA/ZA]; Department of Physics, Rand Atrikaans University, Cnr Kingsway & University Roads, Auckland Park, 2006 Johannesburg (ZA).

- (74) Agent: D M KISCH INC: P O Box 781218, 2146 SAND-TON (ZA).
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(54) Title: GROUP I-III-VI QUATERNARY OR HIGHER ALLOY SEMICONDUCTOR FILMS



(57) Abstract: This invention relates to group IB-IIIA.VIA quaternary or higher alloys. More particularly, this invention relations to group IB-IIIA-VIA quaternary or pentenary alloys which are suitable for use as semiconductor films. More specifically, the invention relates to quaternary or pentenary alloys which are substantially homogeneous and are characterized by an x-ray diffraction pattern (XRD) having a main [112] peak at a 20 angle (20 (112)) of from 26° to 28° for Cu radiation at 40kV, wherein a glancing incidence x-ray diffraction pattern (GIXRD) for a glancing angle of from 0.2° to 10° reflects an absolute shift in the 20(112) angle of less than 0.06°.

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